

VARIABLE STIFFNESS HEATING CATHETER

ABSTRACT OF THE DISCLOSURE

The variable stiffness heating catheter includes a heating catheter shaft including at least one electrically conductive member, a reinforcing tube with apertures formed around the surface of the reinforcing tube, and at least one coaxial outer layer of a polymer, metal, or both for providing desired variations in stiffness along at least a portion of the length of the shaft. The apertures can be formed as axial or helical slits in the surface of the reinforcing tube, and the reinforcing tube can also be formed to be tapered at the point where the apertures are formed in the reinforcing tube to provide a heating catheter that is torqueable and pushable at the proximal end, yet soft and flexible at the distal end.